



Roger Stoutenburgh D0011104

Doon Gibbs

## Ever Wonder What Research Goes on Elsewhere At the Lab?

By Doon Gibbs,  
Deputy Director  
for Science & Technology

The scientific program at a multi-purpose laboratory like Brookhaven spans a wide range of disciplines. The goal of the Brookhaven Lecture Series is to share this diversity across the BNL community.

Inaugurated in 1960 by Gertrude Scharff-Goldhaber, the first female member of BNL's scientific staff, the Brookhaven Lecture Series continues — 50 years later — to showcase the Lab's science, facilities, and scientific staff through approximately 10 lectures per year.

Typically held on the third Wednesday of the month, a speaker presents a big-picture scientific lecture designed to be accessible to the broader scientific community — beyond peers who are expert in the speaker's scientific discipline.

The annual lecture series is organized by the Brookhaven Lecture Committee, which is made up of individual representatives from each of the scientific departments and divisions at the Lab. Committee representatives work with their respective chairs to nominate speakers. Representatives then work with speakers and the rest of the committee to ensure that each lecture gets across the speaker's scientific motivation and accomplishments to their multi-disciplinary audience.

So, on behalf of the Brookhaven Lecture Committee and our roster of speakers, I invite you to the Brookhaven Lectures. The next lecture is "Fire, Earth, Water, Iron: Harnessing the Elements to Study Nature's Most Elusive Elementary Particle," to be presented by Mary Bishai of the Physics Department on June 30 (see article, right). For more information about the Brookhaven Lecture Series, visit the Brookhaven Lecture website, [www.bnl.gov/bnlweb/pubaf/lectures/default.asp](http://www.bnl.gov/bnlweb/pubaf/lectures/default.asp).

## Suzanne Davidson to Become BNL's New ALD for Finance

Suzanne Davidson, Financial Operations Manager at Pacific Northwest National Laboratory (PNNL), has been named Assistant Laboratory Director for Finance at BNL, effective June 28.

With an operating budget of \$20 million and a staff of 140, Davidson will provide leadership, direction, and oversight for the financial affairs of BNL, which had an annual budget of approximately \$880 million in fiscal year 2009 and currently has more than 2,900 employees. Her responsibilities include financial and administrative activities such as financial services, budget, corporate matters, policies, and business systems.

Davidson will advise management on the internal allocations of Laboratory funds and will provide implementation mechanisms for financial management systems. She will also serve as Chief Financial Officer for Brookhaven Science Associates, the company that manages Brookhaven Lab for DOE.

"I am thrilled and honored to be selected for this position at Brookhaven," Davidson said. "It is a very exciting time for the Laboratory with construction of a world-class research

facility — the National Synchrotron Light Source II — and the Lab management's plan for growth and development. I am looking forward to being part of the team that is creating such a promising future for Brookhaven Lab."

After earning a B.A. in business in 1985 from Washington State University (WSU), Davidson began her career at PNNL in the same year as a financial specialist.

While working at PNNL, she earned an M.B.A. in 1989, also from WSU. She moved through the ranks at PNNL to become the Business Development and Analysis Department Manager in 2001, responsible for budgeting, administration, and management reporting for an annual operating budget of \$700 million. In 2004, she became a Senior Analyst, a position that included managing and implementing a plan to improve the effectiveness of PNNL's business systems. In 2006, she was named PNNL's Financial Operations Manager, leading a staff of 65 with an annual operating budget of \$8.9 million, a position she held until she joined BNL. — Diane Greenberg



Suzanne Davidson

## Scientists ID Bacterial Genes That Improve Plant Growth

Findings could lead to new strategies for sustainable agriculture and biofuel production

You might think that bacteria that "invade" trees are there to cause certain destruction. But like the helpful bacteria that live within our guts, some microbes help plants thrive. To find out what makes these microbe-plant interactions "tick," scientists at BNL decoded the genome of a plant-dwelling microbe they had previously shown could increase plant growth by 40 percent.

Their studies, published in the May 2010 issue of *PLoS Genetics*, identified a wide range of genes that help explain this symbiotic success story. The work could move the approach of using bacteria as growth-promoting agents one step closer to implementation for improved agriculture and biofuel production.

"To fuel and feed the planet for the future, we need new approaches," said lead author Safiyh Taghavi of the Biology Department. "Biofuels derived from plants are an attractive alternative energy source, but many biofuel feedstock crops are in direct competition with food crops for agricultural resources such as land, water, and fertilizers. Our research is looking for ways to improve the growth of biofuel feedstock plants on land that cannot be



Safiyh Taghavi

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economically used for food production. What we learn might also be put to use to increase the productivity of food crops," she added.

The BNL team of Taghavi, Daniel van der Lelie, Adam Hoffman, Yian-Biao Zhang, Lee Newman, and Sébastien Monchy, all of BNL; Michael Walla, University of South Carolina; and Jaco Vangronsveld, Universiteit Hasselt, Belgium, has been studying a species of bacteria isolated from the roots of poplar trees.

"Poplar is a model species for biofuel production, in part because of its ability to grow on marginal soils unsuitable for food crops," said van der Lelie, who leads the research program. Previous studies by the van der Lelie-Taghavi group have shown that the bacterium

(See *Plant Growth* on page 2)

## 458th Brookhaven Lecture, 6/30

### 'Fire, Earth, Water, Iron: Harnessing Nature to Study the Neutrino'

Fire, Earth, Water, Iron — together, these ancient powers of nature set the mood for adventure: to approach them unwarily can mean danger; to harness them successfully is exciting.

Scientists are harnessing the properties of immense natural powers to capture and learn more about one of the most minute particles ever known: the neutrino. Ghostlike neutrinos pour continuously in billions per second through the earth and everything on it, yet they interact so weakly with all other material that they pass almost without trace.

Already, many years of experiments have yielded great discoveries about the neutrino: for example, there are three types, electron, tau, and muon neutrinos — one for each generation of the lepton family of particles — and they can oscillate, or change from one type to another. Yet deep mysteries remain. What is the mass of the electron neutrino? Could neutrino research shed light on the origin of the matter/anti-matter asymmetry in our Universe? Are there only three generations of leptons?

To learn more, join Mary Bishai of the Physics Department on Wednesday, June 30, as she gives the 458th Brookhaven Lecture to describe the latest adventures in neutrino research. Titled "Fire, Earth, Water, Iron — Harnessing the elements to study Nature's most elusive elementary particle," this free talk, which is open to the public, will be given at 4 p.m. in Berkner Hall. Refreshments will be offered before and after the talk. Visitors to the Lab of 16 and older must carry a photo I.D.

As Bishai will explain, neutrinos come from many sources, including the fiery heart of the sun. She will describe how in a huge underground body of water in Super-Kamiokande, Japan, scientists proved that neutrinos from cosmic rays change from one type to another. She will also talk about her work with colleagues in ongoing experiments such as MINOS at the Fermi National Accelerator Laboratory in Illinois and the Soudan Mine, Minnesota, Daya Bay in China, and the planned Long Baseline Neutrino Experiment stretching between Fermilab and North Dakota, in which earth, iron and other elements play essential roles.

Bishai, who earned her Ph.D. in physics at Purdue University in 1999, joined the Physics Department in July 2004. Her research interests are in the physics of quark and lepton flavors, particularly the study of neutrino flavor oscillations. Prior to joining BNL, she spent five years as a postdoctoral associate at Fermilab studying the properties of bottom quarks at the Tevatron proton anti-proton collider.

To join the speaker for dinner at a restaurant off site after the talk, contact Deborah Kerr, [dkerr@bnl.gov](mailto:dkerr@bnl.gov), Ext. 3857.

— Liz Seubert



Mary Bishai

Roger Stoutenburgh D3560410

## In Memoriam

**Frances Hydoski**, who became an inventory records clerk in the Technical Services Division on October 27, 1952, and retired as an assistant accountant on June 30, 1984, from the Fiscal Division, died on March 10, 2009. She was 88.

**Clinton Coone**, who joined the Lab on March 14, 1966, as a custodian in the Plant Maintenance Division, and retired as a storeskeeper from the Supply & Materiel Division on December 22, 1988, died on February 20, 2010. He was 88.

**Harold Euler**, who joined BNL on April 21, 1947, with the life number of 605, as a design draftsman B in the Architectural Planning & Plant Maintenance Division, died at 89 on March 15, 2010. He retired from Plant Engineering as a senior project engineer on February 28, 1986.

**Robert Jasaitis**, who worked for the Lab in the Alternating Gradient Synchrotron Department as a contract laborer from February 23, 1978, to December 29, 1978, and joined the staff as a technician IV on January 2, 1979, died at 84 on March 25, 2010. He had retired as a technical specialist on September 30, 1988.

**Thomas Mullany**, who joined the Design Group in the Accelerator Project as a draftsman B on July 2, 1951, and retired from the National Synchrotron Light Source Department as a senior design engineer on June 30, 1982, died on April 17, 2010, at the age of 88.

**George Yengel**, who joined the Plant Maintenance Division as a custodian on May 11, 1964, and retired from the Plant Engineering Division on September 26, 1983, as a sewerage treatment plant operator A Group Leader, died at 86 on May 24, 2010.

## Arrivals & Departures

— Arrivals —

Michael Arens ..... CEG&PA  
Christian Cullen ..... C-AD  
James Diller ..... NNS  
Margie Goodsell ..... Diversity  
Shweta Saraf ..... NSLS II

— Departures —

Felicia Hartsough ..... HR/OM  
Xinguo Hong ..... NSLS

## Changes in BNL Rad Protection Program

**All staff who have RAD GERT and Contamination training must complete a 5-minute new training course by June 28**

In June 2007, 10CFR 835, Occupational Radiation Protection Rule was amended to clarify radiation protection requirements. To ensure that changes to the program are communicated and understood by radiological workers, an updated training course 10CFR835 was added to the BNL Training Website. The new course takes approximately five minutes to complete and can be accessed from <http://training.bnl.gov/demo/courses/index.html>.

Staff who are required to have Radiological Worker I, GERT and Contamination training must complete the updated training by June 28. Those who fail to do so by this date will be unable to perform work in areas controlled for radiological purposes until training is completed.

## Special Award Winners at 2010 NSLS CFN Users' Meeting

Two special awards were given at the National Synchrotron Light Source (NSLS)/Center for Functional Nanomaterials (CFN) Users' Meeting in May: the NSLS Users' Executive Committee Community Service Award to NSLS employees Mike Caruso and Rick Greene, and the Julian Baumert Ph.D. Thesis Award to Jonathan Rameau, a postdoctoral researcher in BNL's Condensed Matter Physics and Materials Science Department.

The UEC Community Service Award is given for outstanding service, innovation, and dedication to users of the NSLS.

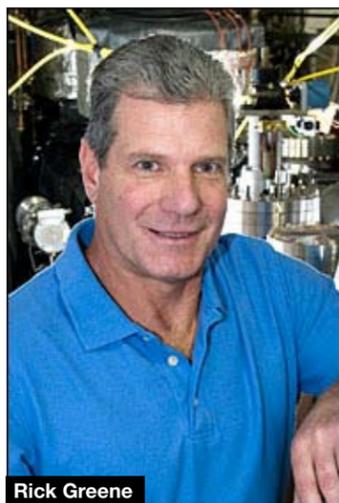
**Mike Caruso:** Caruso, a mechanical technician for the NSLS vacuum ultraviolet (VUV) beamlines, joined BNL in 1981 to work in the ultra-high vacuum group on the ISABELLE project. In 1983, after ISABELLE was terminated, he transferred to the Alternating Gradient Synchrotron. He joined the NSLS vacuum group in 1984, servicing the X-ray, VUV, and Booster rings as well as the Linac. He now works with the Mechanical Technicians group, providing experiment support, performing leak testing, making repairs, and installing upgrades. He also assists with R&D work for NSLS-II. Caruso earned an associate's degree in science in 1980 from Suffolk Community College and an electronics degree in 1984 from the National Radio Institute of Electronics.

Caruso was recognized for his great skill in vacuum systems as well as his unfailingly sunny personality. "Mike is very helpful, always smiling and ready to help," said one user in support of his nomination. "He's got the most consistently cheerful and optimistic outlook I've ever seen in a person," said another user.

**Rick Greene:** Greene is a mechanical technician for the NSLS x-ray beamlines. After graduating from a special BOCES aircraft mechanic program and working in the field for several years, Greene joined BNL in 1978 — the year ground was broken for the NSLS — as a vacuum technician. He



Mike Caruso



Rick Greene



Jonathan Rameau

was involved in numerous stages of construction, assembly, and commissioning for the facility's storage rings, Linac, RF cavities, and beamlines. When NSLS operations began, he was one of the first operations coordinators. In 1986, Greene joined the NSLS instrument development group (now known as the Mechanical Technicians group) as a beamline technician. In this role, he aligns and cuts crystals for monochromators, provides experiment support, and designs, builds, and upgrades NSLS beamlines and equipment.

Greene was recognized for the breadth of talents and expertise that he brings to the experimental floor. In support of his nomination, one NSLS user asked "What doesn't Rick do? He knows vacuum, crystal, rigging, and probably a bunch of things I have never called on him for." Another said: "Rick is also very helpful with any technical problem. If you mention it to him, it is for sure that it will be solved."

Caruso and Greene received \$250 gift certificates in recognition of their excellent service. Their names also will be engraved on a plaque in the NSLS lobby.

**Jonathan Rameau:** The Julian Baumert Award is given to a researcher who has recently conducted a thesis project that included measurements at the NSLS. It was established in memory

of Julian David Baumert, a BNL physicist who was working on x-ray studies of soft-matter interfaces at the NSLS before he died in June 2006.

Rameau earned two bachelor's degrees from Vassar College: in physics and English literature. In 2009, he received his Ph.D. in condensed matter physics from Stony Brook University (SBU). His thesis, titled "High Resolution Photoemission Experiments on Copper Oxide Superconductors," involved two stages of work at the NSLS focused on studying strongly correlated materials.

First, Rameau had to build a new facility at the NSLS that allows researchers to compare photoemission spectra from both laser-generated ultraviolet light and synchrotron radiation.

"Many experts in the field said it could not be done with sufficient intensity, and certainly not by anyone lacking prior experience with lasers," said Rameau's advisor Peter Johnson, Chair of BNL's Condensed Matter Physics & Materials Science Department. "Jon took on the challenge and succeeded admirably."

Rameau used the new facility to study high-temperature superconducting cuprates, materials that conduct electricity without resistance and could some day be used in energy-saving applications like high-efficiency

transmission lines in the U.S. power grid. By comparing the spectra obtained using synchrotron radiation and laser-based photoemission, he was able to make the first observation of the coupling, or interaction, of valence-based electrons to a low-energy phonon — a vibration of the ions that form the lattice of a superconductor's crystal.

This study is particularly interesting, Johnson said, because it required the application of the Lucy-Richardson method, a procedure used to reduce the broadening effects associated with the experimental resolution to reveal the fine structure associated with the coupling. The Brookhaven group applied the same techniques to prove the existence of "pockets" in the Fermi surface of the high-temperature superconducting cuprates. This seminal study, published in *Nature*, has been cited 25 times in just 16 months.

Rameau's thesis also was recognized with SBU's Physics Department's Dr. Nathaniel and Fanie Soroff Prize for Outstanding Contributions to Physics. The Baumert award was presented May 25 at the 2010 Joint NSLS and CFN Users' Meeting. Rameau received a \$500 honorarium and travel arrangements to the Users' Meeting, where he gave a 15-minute presentation on his thesis work. — Kendra Snyder

(continued)

## Scientists ID Bacterial Genes That Improve Plant Growth

*Enterobacter* (sp. 638) increases poplar growth by as much as 40 percent.

In the current study — through genome sequencing performed at DOE's Joint Genome Institute, manual genome annotation in collaboration with biologist Monchy, and metabolic analyses performed at the University of South Carolina in collaboration with plant scientist Newman — the scientists identified an extended set of genes that help *Enterobacter* (sp. 638) establish itself in this niche. Remarkable interactions were also revealed between the microbe and its host that help the plant survive and thrive.

Among the bacterial genes identified are ones that code for proteins that help the microbe survive and compete with other species for resources in the soil; take up nutrients released by plant roots; and move toward, adhere to, and colonize poplar root tissues. The microbes also have genes that provide benefits for the plant, including genes that may help confer drought resistance and the ability to coexist with toxic metals, genes that produce antimicrobial agents that protect plants from fungal and bacterial infections, and genes that produce plant-growth enhancing "phytohormones" and precursors that poplar cannot produce on its own.

### Small Business Workshop At Stony Brook, 7/14

The Stony Brook Small Business Development Center announces the next in its free workshop series, "The Direction of Renewable Energy." BNL is a sponsor of this series. The next workshop, "Small Business Innovative Research & New York State Energy Research & Development Authority Grants," will be held on Wednesday, July 14, 8:45 a.m.- noon, at the Small Business Development Center Training Center, Bldg. 17. For advance registration and directions, call 631-632-9837.

"One of the most remarkable things about this association, which we confirmed with our metabolic assays, is that the production of these plant-growth-promoting phytohormones depends directly on the presence of plant-synthesized sugars, such as sucrose, in the growth medium. Also, one metabolite (meso-2,3 butanediol) is known to elicit the induction of systemic tolerance to drought and induced systemic resistance against plant diseases," Taghavi said. So the plant makes sugar that helps the bacteria grow and make phytohormones and other compounds that help the plants grow better and healthier.

"Interestingly, the genes that allow the bacteria to metabolize sucrose and the genes that produce the phytohormones are located on a genomic island, suggesting they may have been acquired together via natural horizontal gene transfer," Taghavi said.

The scientists plan to continue their work by studying how these various genes are expressed during different stages of bacterial colonization of poplar. These studies will further advance the scientists' understanding of the complex interactions, including the role of signaling compounds and other secondary metabolites that play a role in colonization

and plant-growth promotion.

"These basic findings can eventually be translated into comprehensive strategies to exploit the use of these naturally occurring bacteria-plant relationships to improve plant establishment and biomass production. This approach can be applied to improve plant productivity for sustainable agriculture, bio-energy feedstock production on marginal lands, or to fight desertification of arid areas," van der Lelie said.

This research was funded by the DOE Office of Science. The DOE Joint Genome Institute unites the expertise of five national laboratories — Lawrence Berkeley, Lawrence Livermore, Los Alamos, Oak Ridge, and Pacific Northwest — with the Hudson Alpha Institute for Biotechnology to advance genomics in support of the DOE missions related to clean energy generation and environmental characterization and cleanup. JGI is operated for DOE by the University of California.

— Karen McNulty Walsh

BNL has filed a provisional patent application related to this work. For more information about licensing these technologies, contact BNL Licensing Specialist Christine Brakel, [brakel@bnl.gov](mailto:brakel@bnl.gov), (631) 344-7134.

### TIAA-CREF One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Wednesday, July 7, Wednesday, July 21, and Thursday, July 29, to answer employees' questions about financial matters. The consultant will help you: find the right allocation mix, learn about TIAA-CREF retirement income flexibility, and compare life-time income vs. cash withdrawal options. For an appointment, call 1-800-732-8353 or go online at [www.tiaa-cref.org/bnl](http://www.tiaa-cref.org/bnl) and select "set up a meeting."



Performing a study involving native Long Island bees are: (from left) BNL's Natural Resources Manager Tim Green and three students, Lauren McIntyre, Carlos Delao, and Lauren Hemmerly, who are participating in the Pre-Service Teacher (McIntyre, Hemmerly) and Community College Institute (Delao) programs administered by the Lab's Office of Educational Programs.

## Native Bee Study to Add Local Data To More General U.S. Bee Die-Off Study

By Tim Green, Natural Resources Manager

For the past few days, BNLers could have noticed a series of colored plastic bowls (fluorescent yellow, fluorescent blue, and white) arranged in a large X on the lawn north of Berkner Hall, just west of the parking lot, and at the Brookhaven Center, just east of the parking lot. These bowls contained soapy water and some weights to keep them from blowing over. Their purpose was to capture a representative sampling of native bees for a student research project. This work will help the Lab establish a baseline and determine if the apparent bee die-off affecting some areas of the U.S. is having an impact on Long Island bee populations.

Brookhaven manages its lawns and landscapes in a sustainable manner, using little or no fertilizer and no herbicides. This practice results in our lawns' having an abundance of flowering plants that are attractive to wildlife, including native and non-native bees. In an effort to develop an inventory of bees on the Lab site, we identified two "lawn area" locations. We'll also set up additional sampling sites out in "the woods."

The students doing the work will be preparing a poster describing the study results. That poster — along with dozens of others on student projects — will be available for viewing at the Annual Symposium and Poster Presentations on August 12 and 13 at Berkner Hall.

## BERA Events, Trips

The Brookhaven Employee Recreation Association (BERA) is happy to welcome all members (members are everyone with a BNL badge) — to join in club activities, take trips, etc.

At the BERA Store in Berkner Hall, open weekdays, 9 a.m.-3 p.m., you can buy a ticket (non-refundable) for trips or for concerts that are to be held at the Lab, such as the two concerts this weekend (see page 4). For more information, go to: <http://www.bnl.gov/bera/recreation/events.asp> or stop by the BERA Store, which also sells cards, tee-shirts, items with the BNL logo, and more.

Some of the events you may want to participate in are listed below:

- Ducks home games. \$10/ticket. See spreadsheet of home games for the 2010 Season, <http://www.bnl.gov/bera/recreation/events.asp>.
- Tues., 7/6 (Lab Holiday) - Six Flags, MA. \$35/pp. Depart BNL, 7 a.m., dep. Park, 5 p.m.
- Sat., 7/10 - *Promises Promises*, 2 p.m. Broadway Theatre. \$116/pp Dep. BNL 9 a.m., dep. NYC after the show.
- Sat., 7/17 - Brooklyn Bridge Walking Tour, \$30/pp. Dep. BNL 7:30 a.m., 2-hr tour from 9:30 a.m. walk over bridge; then lunch, shopping on your own. Pick up: 3 p.m.
- Sun. 7/25 - *Addams Family*. 3 p.m. Lunt Fontanne Theatre, Broadway. \$107/pp. Dep. BNL 10:30 a.m., leave after the show.
- Tues., 6/27 - METS vs. Cardinals. \$43/pp, under 21s must be with a parent. Dep. BNL 4 p.m., 7:05 p.m. Leave by 11:30 p.m.
- Sat. 7/31 - Bus to the Bryant Park area of NYC for "Do As You Please" day trip. \$15/pp. Dep. BNL 10 a.m.; dep. NYC, 6 p.m.
- Friday, 8/6 - Tickets will be sold from 6/25. Evening dinner Skyline Princess Cruise, see Statue of Liberty, more. \$105/pp. Dep. BNL 4:30 p.m., dep. after boat docks, approximately 11 p.m.
- Sun. 8/8 - Bus to Battery Park downtown Manhattan for "Do As You Please" day trip. \$15/pp. Dep. BNL 10 a.m., dep. NYC, 6 p.m.
- Fri. 8/13. METS vs. Phillies - \$38/pp. Dep. BNL 4 p.m., leave no later than 11:30 p.m. If under 21, he/she must be with a parent.

## Employee Lunchtime Tour: Water Treatment Facility, Today, 6/25

BNL's clean, fresh, safe water is provided year round. On Friday, June 25, the Employee Lunchtime tour will visit the BNL Water Treatment facility to learn how the quality of Lab water is kept to its excellent standard. The tour group will meet in the upper lobby of Berkner Hall at noon and will return by 1 p.m. No registration is necessary. For more information, call Ext. 2400.

## Prepare to Run/Walk at Jones Beach on 8/3 And Participate in Readiness Session, 6/30

Many BNL runners and walkers will participate in the Marcum & Kliegman Workplace Challenge again on Tuesday, August 3, at 7 p.m. at Jones Beach. If you're interested in participating or volunteering, contact Betty Elder, Ext. 3562; or Jim Marron, Ext. 6222.

Additionally, to get ready for this event, BNL's Health Promotion Program Coordinator, Michael Thorn, is hosting a readiness session at noon on Wednesday, June 30, in the Medical Department Large Conference Room, Bldg. 490. You must preregister at [mthorn@bnl.gov](mailto:mthorn@bnl.gov) or Ext. 8612 to attend. During this session, Jennifer Gatz, who is a competitive runner and triathlete, will hold a Q & A session with advice on 5-kilometer training and racing. Remember to RSVP!

## BSA Noon Recitals: Pianofest Returns, 6/30 and 7/28



Participants in Pianofest, a summer workshop held in the Hamptons, will be showcased in two recitals at BNL, on Wednesday, June 30, and Wednesday, July 28, at noon

## Cafeteria Now Serves Sushi Daily

The Cafeteria is now featuring fresh sushi made daily by the sushi chef. Working in partnership with Nayyarson, AFC Sushi Company is a nation-wide company with close to 3,700 outlets across the U.S. and Canada. AFC Sushi represents fresh-made sushi for businesses, universities, retail stores, and local grocery stores. AFC Sushi also has a concession open at the Wang Center at Stony Brook University. You are welcome to try sushi at the cafeteria today along with the wide selection of other foods from Nayyarson.

## Classified Ads

### Wanted

**DONATIONS OF DOG/CAT FOOD** - For pets of struggling families/elderly. Collection bins are in Bldgs. 134, 400, 510 (X5864), 725, 901, 902. Donations given to local food pantries. Ext. 3161 or [kratto@bnl.gov](mailto:kratto@bnl.gov).

**MAC MICROSOFT OFFICE '08** - license need urgently for a spare, price neg, Ext 2086. Juan, [jsoulier@bnl.gov](mailto:jsoulier@bnl.gov).

**NEW/GENTLY USED CLOTHES** - All sizes, also children's toys, books to be donated to 76 families living in a local shelter. Laura x4027, [lbuscemi@bnl.gov](mailto:lbuscemi@bnl.gov). Kathleen, Ext. 3161 or [kratto@bnl.gov](mailto:kratto@bnl.gov).

### Moving Sale

Steel Frame Futon, \$20. Tall Dresser, 20. Computer desk, \$20. Wood crib: PALI, vg cond, mtrss, bedding incl. \$80. Chnging table, \$30, stroller, \$20. Infant carseat, \$15. Baby Einstein Activ. Cntr, \$20. 924-4068

### For Rent

**MASTIC** - 1 bdrm, eik, full bath, den, own ent/drway, all incl, 10 min to Lab, no smkg/pets 1 mo sec. \$850/mo. joe mondi, Ext. 3499, 219-7241.

**MEDFORD** - 2 bdrm, grd level apt, quiet neighborhd, dead-end st, 15x10 b/r & smaller b/r; 20x25 lr w/f/p eik, pvt ent, 15 min to Lab, 730-8866. \$1,400/mo. 347-901-1468.

**MILLER PLACE** - 3 bdrm, 1/bath, no gar, 15 min to Lab. Wang, 928-5745.

**MILLER PLACE** - 2 bdrm, share lg furn Col. home, resid area, 8mi to BNL, cac, full kit, int/tv, own bdrm, fenced bckyd/deck/grill incl, resp. non-smkr. \$675/mo. 744-8386.

**RIDGE** - lg 1 bdrm, f/p in l/r, sep ent, all util incl/cable/int/access, 5 min to Lab. \$1,150/mo neg. Ext. 4720, 637-775-0828.

**ROCKY POINT** - 2 bdrm. house, new appl., washer/dryer, freshly painted, quiet dead end st, nice yard, full bsmt/attic, util extra. \$1,400/mo. [hoffman1@bnl.gov](mailto:hoffman1@bnl.gov).

**ROCKY POINT** - 1 bdrm upper unit, kit, bath, l/r, balcy, quiet co-op comm, nr stores, lndry rm on prem, prkg, no smkg/pets, cac, incl gas/water. \$1,150/mo. 806-5965.

in Berkner Hall. Sponsored by Brookhaven Science Associates, the company that manages the Lab, the concerts are free and open to the public. All visitors to the Lab age 16 and over must bring a photo I.D.

Pianofest is an East Hampton-based intensive workshop, now in its 22nd season, that addresses the fine points of professional pianism. Its alumni have gone on to make their mark nationally and internationally. For each recital at Brookhaven, the workshop's founder and director, Paul Schenly, will select outstanding Pianofest participants to perform a varied program from the great classical repertoire.

For more information on Pianofest, go to <http://www.pianofest.com>.

(cont'd)

**ROCKY POINT** - 1 bdrm, 2nd flr, priv drwy, incl some util, no smkg/pets. \$795/mo. 821-3287.

**SHIRLEY** - 2bdrm furn apt, grd level, close to BNL, rent incl water/heat/elec/int, no smkg/pets. \$1,100/mo neg. Tomasz, Ext. 7448 or [tomw@bnl.gov](mailto:tomw@bnl.gov).

**SHOREHAM** - spacious, clean 1 bdrm furn studio apt, sep ent & thermo, full bath, kit, patio, big yd, cable TV, no smkg/pets, 7 min to lab, avail now. \$775/mo neg. 747-3495.

### For Sale

**CENTER MORICHES** - Victorian-style hse, 5 bdrms; 3.5 bath; jacuzzi; lg. kitchen w/brkfst nook; Fam. rm. w/fpl, hwdwood/ceramic fls, fin bsmt; 2-car gar, prof. garden, 0.83 acre, \$577,500. 631-766-7189.

**MIDDLE ISLAND** - reduced 4br/2.5bth Victorian, '03 built, excel cond, cac, cherry cabinets; cust. f/p & tile baths; fin rm in bsmt, att. gar, mins to Lab. \$300,000. Ext. 3621.

**MILLER PLACE** - well maintd old field ranch, 3 bdrm, 1 full bath, l/r w/fp, Andersen windows, .34/acre level prop w/1.5 car det gar w/elec, \$260,000 neg. 241-4166.

**MT. SINAI** - quiet, 3 bdrm, 2 bth ranch, eik, f/p; 2-car gar, deck, igp, wood flrs, new furnace, cac, hot tub, skylt, 2/sheds, landscd bckyd w/sunrm, \$399,900 neg. 525-7875.

**ROCKY POINT** - 10 rms, 4 bdrms, 3 bath, eik w/granite cntrtops, l/r w/fp & wet bar, d/r, fin bsmt, a/c, 2-car gar, 42x12' deck, igp, igs, 0.92 acres. \$455,000 neg. 744-7052.

**S. PATCHOGUE** - v/lg 3 bdrm ranch, 1 block to Bay, cac, eik, newly renov, l/r, frml d/r, den, full bsmt, .5 acre. \$330,000 neg. Jim, Ext. 4705, 929-4978.

### Services

A wide range of services provided by BNL employees or their immediate family is available within the online classified ads or by contacting [lseubert@bnl.gov](mailto:lseubert@bnl.gov), Ext. 2346. Services include yardwork, adult or child care, housecleaning, photo scanning, event photography, tutoring, brickwork, carpentry, and much more.

## CALENDAR

Today, Friday, 6/25

### BJ's Wholesale Club

11 a.m.-1:30 p.m. Berkner lobby. Discounts for memberships.

### \*Employee Lunchtime Tour

Noon. Berkner Hall lobby. Meet with others to be taken to the BNL Water Treatment Facility to learn how Lab water is kept to an excellent standard. No registration necessary. Return to Berkner by 1 p.m. See notice, left.

— WEEK OF 6/28 —

Monday, 6/28

### IBEW Meeting

6 p.m. Centereach Knights of Columbus Hall, 41 Horseblock Rd., Centereach. A meeting for shift workers will be held at 3 p.m. in the union office. The agenda includes regular business, committee reports, and the president's report.

Wednesday, 6/30

### CostCo Company

11 a.m.-1:30 p.m. New memberships at \$50.

### \*BSA Noon Recital: 'Pianofest'

Noon. Berkner Hall. Pianists in the "Pianofest" workshop will play. Sponsored by BSA, this free concert is open to the public. Visitors to the Lab 16 and older must carry photo ID. See notice, left.

### \*458th Brookhaven Lecture

4 p.m. Berkner Hall. Mary Bishai, Physics Department, will discuss neutrinos in a talk titled "Fire, Earth, Water, Iron — Harnessing the elements to study Nature's most elusive elementary particle." All are welcome to this free talk, open to the public. Visitors to the Lab of 16 and older must carry a photo ID. Refreshments will be offered before and after the talk. See pg. 1.

Sunday, 7/4

### Independence Day

— WEEK OF 7/5 —

Monday, 7/5

### Independence Day Observed

Lab closed. Enjoy the day!

Tuesday, 7/6

### Floating Holiday

Lab closed. There will be no Bulletin this week.

— WEEK OF 7/19 —

Tuesday, 7/20

### Sambamurti Lecture

3:30 p.m. Large Seminar Room, Physics, Bldg. 510. GERALYN Zeller of Fermi National Accelerator Laboratory will talk on "Expecting the Unexpected: Neutrino Physics at MiniBooNE." All are welcome to this free talk. Refreshments will be offered from 3 p.m.

Wednesday, 7/21

### 459th Brookhaven Lecture

4 p.m. Berkner Hall. James Alessi of the Collider-Accelerator Department will talk on a topic to be announced. All are welcome to this free talk, open to the public. Visitors to the Lab of 16 and older must carry a photo ID. Refreshments will be offered before and after the talk.

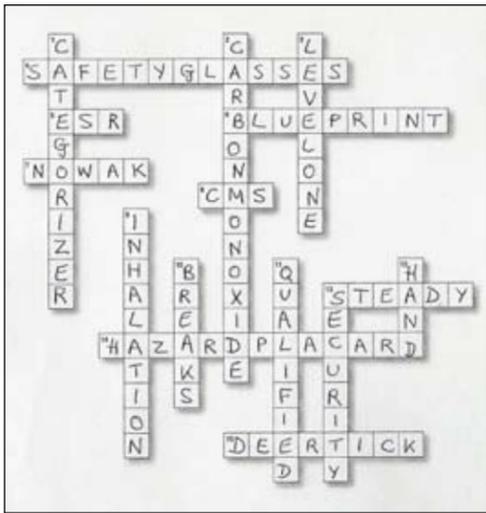
Note: This calendar is updated continuously and will appear in the Bulletin whenever space permits. Submissions must be received by the preceding Friday at noon to appear in the following week's Bulletin. Enter information for each event in the order listed above (date, event name, description, and cost) and send it to [bulletin@bnl.gov](mailto:bulletin@bnl.gov). Write "Bulletin Calendar" in the subject line.

## On-Site Garage Is Open

Although it not as simple as usual to get to the on-site gas station, make the marked detours around the construction to where the new management welcomes BNLers who need gas, vehicle repairs, and NYS inspections, right here on site.

## Safety Day Puzzle: Answers

While some of these answers were easy, some were absolutely not. The great secret was to use the homepage "searchBNL" (top left). For example, for 5 across, you could enter "planning an experiment" and right away, you are led to the page called Experimental Safety Review (ESR). So it was reasonably fair. Remember for the next time!



### Across

- Eye protection (two words)
- Used in planning an experiment to identify hazards, plan work controls, and authorize experiments (abbrv.)
- BNL's plan for growth and development
- Lab-wide Occupation Safety & Health Management Representative
- An inventory of all chemicals onsite is maintained in this computer based system (abbrv.)
- This type of site siren signals indoor/building assembly
- This is at the entrance of every lab and should be read before entering (two words)
- Can carry Lyme disease

### Down

- Immediately notified upon discovery of abnormal conditions or occurrence
- Colorless, odorless, poisonous gas that displaces oxygen in the bloodstream
- Severity of violation when exceeding speed limit 1-15 mph (two words)
- Most common route of entry for toxic substance
- Five minute \_\_\_\_ with appropriate exercise reduces the risk of developing ergonomic injuries
- Staff who perform hazardous work must be \_\_\_\_ to complete assigned tasks
- Type of signal used when biking
- Environmental, Safety, \_\_\_\_, and Health Policy

## Classified Advertisements

Access many more current job openings on the World Wide Web at [www.bnl.gov/HR/jobs/](http://www.bnl.gov/HR/jobs/) and see also <http://www.bnl.gov/HR/careers/>

### Placement Notices

The Lab's placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present benefits-eligible employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present benefits-eligible employees within the Laboratory; and (3) outside applicants. In keeping with the Affirmative Action Plan, selections are made without regard to age, race, color, religion, national origin, sex, disability or veteran status. Except when operational needs require otherwise, positions will be open for one week after publication. For more information, contact the Employment Manager, Ext. 2882.

To apply for a position, go to [www.bnl.gov](http://www.bnl.gov). Select "Job Opportunities," then "Search Job List."

**LABORATORY RECRUITMENT** - Opportunities for Laboratory employees only.

**PESTICIDE APPLICATOR** - Apply pesticides and assist in animal control in accordance with Integrated Pest Management Practices. Must be a driver C/C 531 and meet the requirements of the Job Assessment form. Individual will perform duties and responsibilities of a Driver and participate in Driver OT opportunities in accordance with the OT List. Candidate must satisfactorily complete the required 30-hour core course of instruction and core exam and the required 10-hour category specific instructional exams. Site Services Division. Please submit Employee Transfer form to Diana Hubert, Bldg. 400B, referring to Job ID #15399.

### Motor Vehicles

- 06 SUZUKI GSX1300R LI HAYABUSA - 3K mi. white, mint, Tsukigi exhaust, pwr Commander, 14k new. \$6,100 neg. 702-3402.
- 04 HYUNDAI ELANTRA - 69.6K mi. black, 4dr, cd, p/l, p/w, org owner, gd cond. \$4,900 neg. 789-9143.
- 03 TOYOTA COROLLA LE - 33.7K mi. grey, excel cond, v/low mi, c/c, 4 new tires. \$8,900 neg. Choi, Ext. 2723.
- 00 NISSAN MAXIMA - 110.25K mi. a/c, c/c, lther, Bose am/fm/cd, p/w, p/dr p/l, tcs, abs, air bgs fr&sd, \$4,250 neg. 278-2192.
- 00 CHEVY 2500 CARGO VAN - 197K mi. runs well, new brakes, set for constrctn w/slide out drwr. \$2,900 neg. 926-4505.
- 98 NEWMAR COUNTRY AIRE - Motorhome, diesel, 40', fully equipped, 1 slide out, call for pricing. Bob, 289-1834.
- 95 DODGE CARAVAN - 123K mi. a/t, a/c, am/fm/cass, green, 7 seater, new tires/brakes, runs well. \$750 neg. 828-8509.
- 89 DODGE RACK TRUCK - 98K mi. white cab, freshly grinded & painted racks, new deck, 8cyl, runs well! \$1,200 neg. 926-4505.
- TIRES - 4, excel cond, P195/70R 14, steel belted radials on rims, \$175. 882-0519.

### Boats

28' RINKER FIESTA V 260 - 1992 prof. maint, low hrs, new top/prop. In water @ Mt. Sinai, w/trailer. \$9,400 neg. Frank, Ext. 4320.

### Furnishings & Appliances

A/C - Maytag M7X05F2A wall/window, 5200 BTU/hr, gd cond, \$45/neg. 344-4290.

**BOY'S BEDROOM** - gray fomica platform bed w/drwr mattress, dresser, desk top hutch \$450. Leo, Ext. 3103, 728-0992.

**CLOTHES WASHER & DRYER** - gd working cond, \$50/ea. Nick, Ext. 3205.

**CRIB FOR SALE** - Alph 3-in-1 convertible natural color crib is avail w/mattress, gd cond, ask/\$30. Syed, 344-2770.

**CURIO CABINET** - Lt washed oak, corner cabinet, 80" H x 33" W, mint cond, ask/\$400/neg. 732-1243.

**DINING SET** - table w/leaf, 6 cushioned chairs, lighted hutch, cherry color, like new, \$300. Ext. 7496, 828-8509.

**DUAL LOFT BED** - lt wood grain veneer built-in desk w/chair/dresser drawers. gd cond, photos, ask/\$550. Steve, Ext. 2897.

**ELECTRIC STOVE** - excel cond \$250, white/self-cleaning, proceeds go to charity. Pics avail. Nina, Ext. 5894, 475-1297.

**FILING CABINET** - Metal/Beige color. Fits 11"x 8.5" paper. Two drawer. \$15. Proceeds to charity. T. 631-475-1297.

**GLIDER ROCKER** - maple chair, \$215. Good for relaxation lade@uspsports.com. 631-447-0419. 516-740-8418.

**KITCHEN TABLE** - farm house type, light pine wood, pics avail, ask/\$75. Ext. 5864.

**LIFT CHAIR** - Pride, 2 positions, burgundy, great cond/\$100. 821-1271.

**LOVE SEAT** - gd cond, light yellow printed color, \$25. Ext. 7496, 828-8509.

**MATTRESS** - SertaPedic w/matching boxspring, only 1 1/2 yrs old, great cond, \$350. Mary, Ext. 2711 or mchuc@bnl.gov.

**MICROWAVE** - GE, over the range, black/\$40. 751-4539.

**OAK MEDIA CENTER** - Golden oak stain, 2'x4'x6'. storage, TV section 30" w, v/gd cond, pic avail. \$500/obo. Ext. 3932.

**REFRIGERATOR** - gd working cond, white, \$100/obo. Don, Ext. 2253, 821-3320.

**SHELVING** - 2/metal 4 shelf utility units, 30x12x60 \$15/ea. Tom, Ext. 3085.

**SOFA & LOVE SEAT** - Ashley, gd cond, clean, no pets/smkg, 250/obo. gmishra@bnl.gov.

**SOLID CHERRY DRESSER** - Davis Cabinet Co. w/Wall Mirror, 7 English dovetail drawers, photos. price neg. Sue, Ext. 4931.

**TAG SALE** - d/r set \$500; kit set \$200; b/r set \$500; rocker \$100; side-by-side refrig \$100; air hockey \$100; pool table \$100; 50/36" TVs \$300/\$100. 624-6834.

**TASK CHAIR** - Black vinyl task chair w/ height adjustment, gd cond, \$30. Steve, Ext. 2897 or boose@bnl.gov.

**TV** - Toshiba 27", 4 yrs old, gd working cond, \$60. hoffman1@bnl.gov.

### Audio, Video & Computers

19" TOSHIBA TV - HD LCD, \$125. Lynn, Ext. 5960 or cohen@bnl.gov.

32" VIZIO VO320E 32" eco lcd hdtv, 720p, mint cond, w/hdvt antenna/cables, 9 mons, \$220. 344-3839 or yscho@bnl.gov.

4 SOUNDSTREAM CAR AMPS - 3/270 watt rms Picasso amps; 1/500 watt rms Tarrantula amp from Soundstream, 2 channels, all brand new in bx, 255-8683.

**CARTOON VCD** - huge amt for kids, \$1/ea. Syed, 344-2770.

**GPS** - TomTom, 4.3" screen, 720 GO, orig box w/mount & leather case, \$99. Tom, Ext. 3085.

**IPHONE 3GS 32GB** - 2/wks old; like new cond. ios4. swap sim and go - no contract! appicare until 6/29/11, incis in-case cover, box, cables, \$400. Mark, Ext. 3970 or mwahlert@bnl.gov.

**IPOD NANO** - new 16 Gb, red, latest generation built-in video camera, org/\$180, ask/\$150, Ext 2086. jsoulier@bnl.gov.



Joseph Rubino D9520610



Joseph Rubino D9350610



Joseph Rubino D9120610



Joseph Rubino D9590610



Joseph Rubino D9270610



Joseph Rubino D9300610

## Safety Day a Success

BNL's first Safety Day proved successful in encouraging a safety-first approach for everyone. The Environment, Safety & Health Directorate (ES&H) conducted the event for all on Wednesday, June 16, at Berkner Hall.

"Improving safety culture is a Lab priority," said Manager of the Safety & Health Services Division Ed Nowak. "Safety Day is an opportunity to show appreciation to the Laboratory community for improved safety performance and awareness, and give employees an opportunity to participate actively in safety programs and hands-on activities. We hope everyone who attended learned something useful. I want to express my appreciation to all those who helped organize this event."

Safety Day featured interactive activities, including fire extinguisher, CPR, automated external defibrillator, fall prevention, and lifting demonstrations. With traffic safety improvement a Lab-wide priority, attendees sharpened their skills on BNL's new driving simulator and rode in the Sheriff Department's DWI simulator.

"The Lab's new driving simulator takes a little getting used to but it proved very useful," said Bob Selvey of Industrial Hygiene. "I learned a driving technique I've instinctively done for years is incorrect. I'm glad I learned this way rather than with a police officer handing me a citation. Also, I wrecked twice and it didn't hurt."

Other activities included bicycle, motorcycle, and boating safety; contests for free prizes; and vendors' demonstrations of safety merchandise. As a special thank you for recent improvements in BNL's safety performance, everyone was welcome to free ice cream.

For more information about safety at BNL, visit the safety intranet site at <http://intranet.bnl.gov/safety>.

— Jim Green



Joseph Rubino D9100610

**MAC 6400 VEE COMPUTER** - video editing ed, OS 8 & 9, 40 GB HD, w/network card, incl kbd, mon. mouse, trackball, flight stk, sftware titles. \$150/obo. 821-3320.

**VCD-DVD PLAYER** - DVDplayer/VCR DV220mw9 - Magnovox, 4head onetouch recording, longplay, pd/\$80, new/used few mos, \$50/neg. 344-2770.

**DOG COLLAR** - new prong training collar 3.8mm/22" w/rubber coated tips, \$10. khayes@bnl.gov.

**ELLIPTICAL** - Nordictrack CX998, gym quality, 10 wkout progs, carb counter, EKG heart mon, more. Ask/\$300. Ext. 7465.

**PETS** - beagle puppies 5/females, 2/males AKC reg, all shots, wormed ready in 6 wks, \$300. joe mondi, Ext. 3499, 219-7241.

**SURF CASTING ROD** - rod only, no reel, old, in gd shape ask/\$75/obo. Ext. 5864.

**TREADMILL** - DP treadmill elect, gd cond, u-pic up, \$50. Al, Ext. 7859 or farland@bnl.gov.

**WEIGH & BENCH SET** - Body B Vision Olympic, like new only used a few times/\$250/all. 235-7068.

### Tools, House & Garden

**COMMERCIAL PAINT/STAIN SPRAYER** - Campbell Hausfield, wheeled, 5 gal pail, capac/75' of hose, spare nozzle, cheaper than renting, \$125. James, Ext. 7079.

**NAILS** - almost full box, 10D, 3" 9GA, \$35. Ext. 5864.

**PAINTER'S LADDER** - Costco brand, 4' w/3 steps, 57" bottom to top of support bar w/ tool tray, \$20. Linda, Ext. 2733, 395-6794.

**VACCUM CLEANER** - Eureka, new/used few mos, \$10. Syed, 344-2770.

### Miscellaneous

24" RCA TV - combo w/36x24x60/oak cabinet; staimstr 4K-Pt/barely used, pd/\$2K; 9'x10' Oriental rug w/pad; Craftsman gas/wd-wacker, 32cc, 1.9 cu in, mke offr(s). 928-6930.

**BABY** - GRACO baby swing/\$25; changing table/\$20, clothes rack, \$22; girls clothes, 0-7 yrs. pics avail, for charity. 475-1297.

**LAMPS/GPS** - 3 new spotlight flr lamp/\$20; clamp to desk light/\$5; new Toro low volt light set/\$30, Tom, Ext. 3085.

**MOTORCYCLE JACKET** - Firstgear Torent mesh jckt, new w/tags, med, grey/black, waterproof liner, pics \$75. Rich, Ext. 7294.

**SWIMMING POOL** - 21x4.5, round, gd cond, you take down, \$400/all. Ext. 5169.

**TICKETS** - Natalie Merchant, Town Hall-NYC, Fri 7/18, 8pm, 6/tkts, will sell any amount, Balcony Row "B", Face value \$52.50. pizzulli@bnl.gov.

### Yard & Garage Sales

**ROCKY POINT** - 27 Queen Rd, Sat/Sun, 6/26-27, 9a-3p, great old stuff. Ext. 7440.

### Car Pool

**PLAINVIEW** - established 3-Person car pool meeting in Plainview looking for 4th person, 8-4:30. Ron, Ext. 6068.

### Happenings

**CRUISE** - 7-Day Caribbean Cruise on Apr 10th 2011 to Cayman Islands, Cozumel, Isla Roatan & Belize w/2 fun days at sea. All for \$789.72pp dbl occup balcony. Dep req'd. Kim, Ext. 7465, 399-3098.

**DINNER/SHOW OUTING** - Sat, Oct 16 to see "Joseph," Sight & Sound Theatre, PA. All you can eat dinner @ Good n Plenty, \$115pp. \$60 deposit due now. Kim, Ext. 7465, 399-3098 or khayes@bnl.gov.

### Free

**CAT** - very sweet indr cat needs home, spayed, come w/litter box/kitty litter/food, pic avail, or come meet her. Bob, 516-805-3178 or bmetz@bnl.gov.

(continued on page 3)